

Exhibit A

Claim Element From The Only Independent Claim 1 of the '279 patent	YOSHIO 10-048344 Prior Art Element
<p>A document shredder for shredding one or more data bearing documents selected from the group consisting of paper, optical discs, and floppy disks, comprising:</p>	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
<p>a housing;</p>	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
<p>a document shredder mechanism received in the housing and including an electrically powered motor and cutter elements,</p>	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
<p>the document shredder mechanism enabling one or more data bearing documents selected from the group</p>	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can</p>

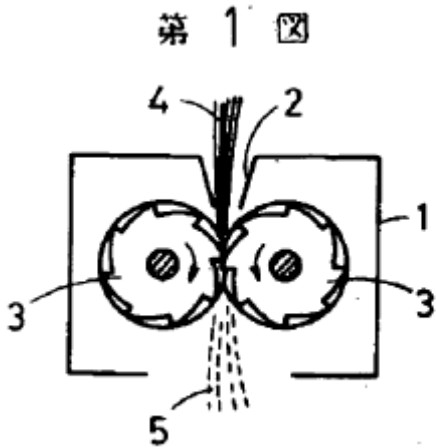
consisting of paper, optical discs, and floppy disks to be fed into the cutter elements	<p>approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
and the motor being operable to drive the cutter elements so that the cutter elements shred the one or more documents fed therein;	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
the housing having an opening enabling the one or more data bearing documents to be fed therethrough into the cutter elements of the document shredder mechanism for shredding;	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
a waste bin disposed beneath the document shredder mechanism, the waste bin configured to receive shredded documents from the document shredder mechanism,	<p>“The device which can apply this invention is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
the waste bin being manually removable	<p>“The device which can apply this invention</p>

<p>from beneath the document shredder mechanism for emptying of the shredded documents therein;</p>	<p>is not restricted to a rolling mill, but if it is a device with which a human body can approach critical regions, such as an actuator, it is almost applicable to all. For example, it is applicable to a press device, a cutter, a paper shredder,”</p> <p>Yoshio 10-048344, Detailed Description paragraph 25.</p>
<p>a discriminating proximity sensor comprising an electro-conductive sensor element</p>	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p>
<p>at least in part adjacent the opening,</p>	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an</p>

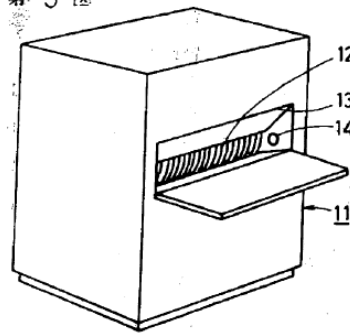
	<p>opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p>
the proximity sensor being configured to indicate a presence of a person or animal,	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p>
but not a presence of the one or more data bearing documents,	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an</p>

	<p>opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p>
<p>in proximity to the opening based on the detection via the sensor element of an inherent electrical characteristic of the person or animal; and</p>	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p>
<p>a controller operable to disable the cutter elements responsive to the indicated presence of the person or animal.</p>	<p>“[0005] Then, the purpose of this invention is to provide the safeguard using the sensor which can detect the existence of a human body only in a desired field, and such a sensor.</p> <p>[0006] [Means for Solving the Problem] To achieve the above objects, a sensor by this invention, one pair of electrode plates by which set a predetermined gap and the placed opposite was carried out mutually, and said gap are arranged in an opposed position of each electrode plate of an</p>

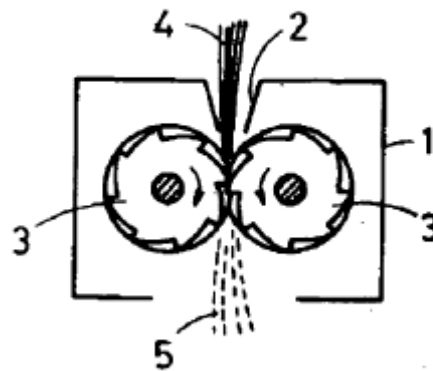
	<p>opposite hand, it has a grounded shield plate, and it is constituted so that it may detect whether at least some of specific dielectrics, i.e., human body, exist between electrode plates from change of electric capacity between electrode plates.”</p> <p>Yoshio 10-048344, Detailed Description paragraphs 5-6.</p> <p>“According to the above-mentioned embodiment, although he is trying to suspend the drive of the rolling mill 10 with the signal from the control device 68 of the safeguard 24, only an alarm is emitted, or a drive is suspended with an alarm, and safety can be planned. Of course, it is also possible to operate other safety means.</p> <p>Yoshio 10-048344, Detailed Description paragraph 23.</p>
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Claim Element From The Only Independent Claim 1 of the '279 patent	SUZUKI 57-76734 Prior Art Element
<p>A document shredder for shredding one or more data bearing documents selected from the group consisting of paper, optical discs, and floppy disks, comprising:</p>	<p>“A safety device for a shredder”. Title of Suzuki</p>  <p>“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”</p> <p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.</p>
<p>a housing;</p>	<p>Item 11 in Figure 3 of the Suzuki patent (below) identifies a housing</p>

第 3 圖



第 1 圖



“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

a document shredder mechanism received in the housing and including an electrically

Figure 1 of Suzuki identifies a shredder mechanism.

powered motor and cutter elements,

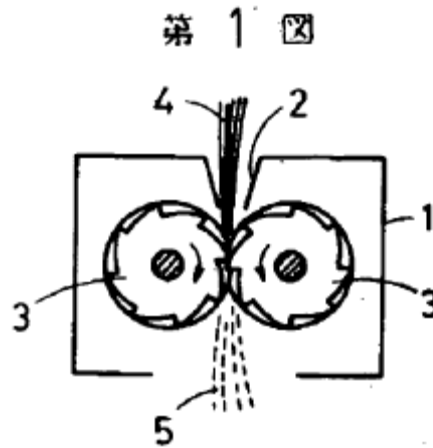


Figure 1 identifies cutter elements. Under the doctrine of inherent anticipation, shredders powered by electric motors were among the known art of shredders.

“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

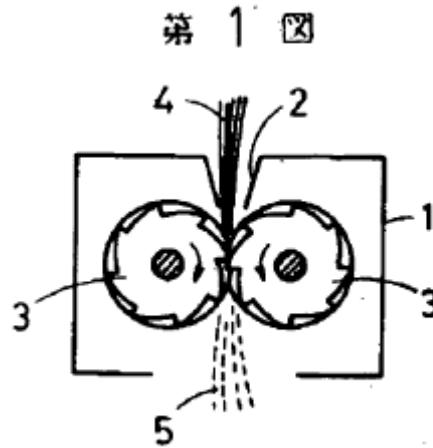
Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

the document shredder mechanism enabling one or more data bearing documents selected from the group consisting of paper, optical discs, and floppy disks to be fed into the cutter elements

Suzuki discusses paper being shredded in section 3:

“..the operator may become injured when his/her hands or fingers become caught in the opening by mistake while the discarded

document is being shredded.”

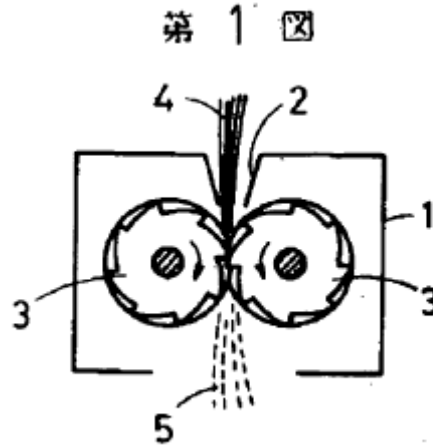


“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

and the motor being operable to drive the cutter elements so that the cutter elements shred the one or more documents fed therein;

Figure 1 of Suzuki identifies cutter elements (3) shredding a document.

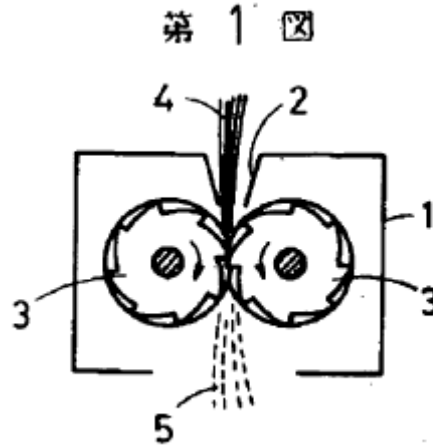


“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

the housing having an opening enabling the one or more data bearing documents to be fed therethrough into the cutter elements of the document shredder mechanism for shredding;

Figure 1 of Suzuki identifies an opening (2) that enables one or more data bearing documents to be fed therethrough into the cutter elements (3).



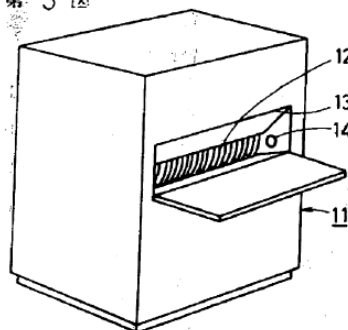
“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

a waste bin disposed beneath the document shredder mechanism, the waste bin configured to receive shredded documents from the document shredder mechanism,

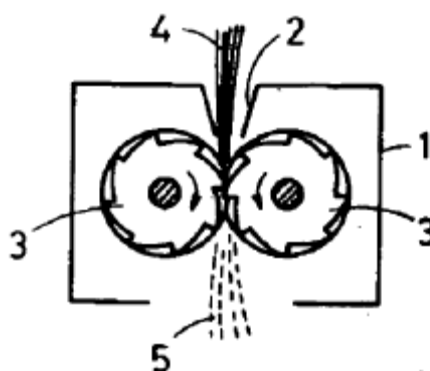
Item 11 in Figure 3 of the Suzuki patent (below) identifies a housing that would inherently contain a waste bin.

第 3 圖



Turning to Figure 1:

第 1 圖

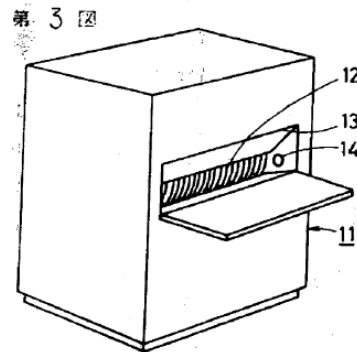


“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. AS indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

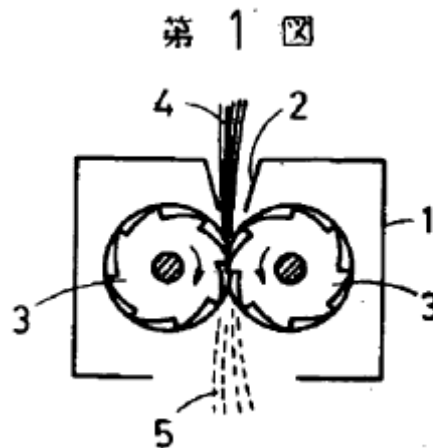
Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.

the waste bin being manually removable from beneath the document shredder mechanism for emptying of the shredded documents therein;

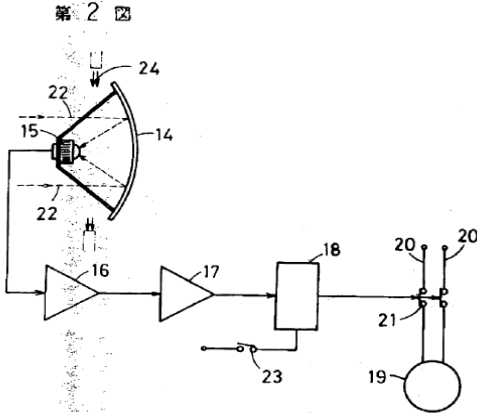
Item 11 in Figure 3 of the Suzuki patent (below) identifies a housing that would inherently contain a waste bin. The bin would necessarily be removable.



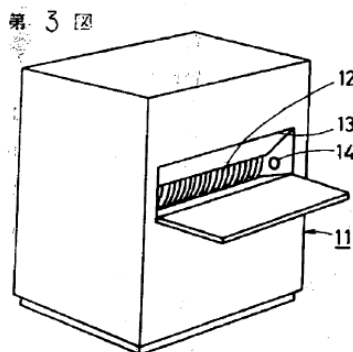
Turning to Figure 1:



“The overall structure of the shredder which is used to cut discarded paper and others into tiny pieces is as follows. As indicated in Figure 1, a pair of cutters (3), (3) which engage with one another, are rotated by a suitable motive force in the direction shown by the arrow, directly below an insertion opening (2) which is disposed on the upper part of a housing (1) and discarded document (4), which has been inserted in the insertion opening (2) is cut into tiny pieces (5).”

	<p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification, Detailed Description of Device.</p>
<p>a discriminating proximity sensor comprising an electro-conductive sensor element</p>	<p>Figure 2 of Suzuki identifies an infrared sensor (15). In an infrared sensor, the electrical conductivity of the sensing element is changed by the energy of absorbed infrared radiation. Therefore, an infrared sensor is an electro-conductive sensor element under the broad term, as used in the claim.</p>  <p>“In the aforementioned device, when the operator’s hands and fingers mistakenly come in contact with the cutter (12), thermal rays (22) are reflected by the concave mirror (14) and the output voltage of the infrared ray sensor (15) changes. This voltage is amplified by the amplifier (16), passes through the filter (17), operates the lock circuit (18), opens the switch (21) and immediately stops the motor.”</p> <p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734.”</p>
<p>at least in part adjacent the opening,</p>	<p>Item 11 in Figure 3 of the Suzuki patent (below) identifies the concave mirror (14) as being adjacent to the opening. The infrared sensor element (15) of figure 2,</p>

which operates closely with the concave mirror, would therefore also be adjacent to the opening.

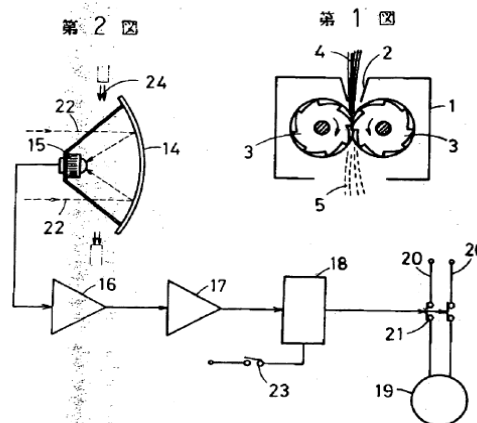


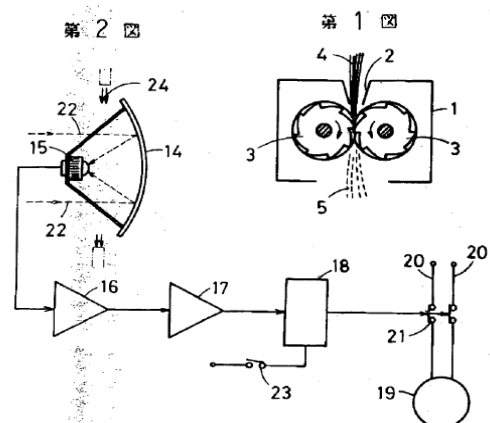
“Concave mirrors (14) are set on both left and right ends lengthwise of a discarded paper insertion opening (13) on the front surface of the shredder (11) (the concave mirror on the left is not shown in the figure) so that they face each other.”

Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734”, Specification section, sub-section 3.

the proximity sensor being configured to indicate a presence of a person or animal,

An infrared sensor detects the heat given off by people or animals. The electrical conductivity of the sensing element is changed by the energy of absorbed infrared radiation. Therefore, an infrared sensor is an electro-conductive sensor element under the broad term as used in the claim.

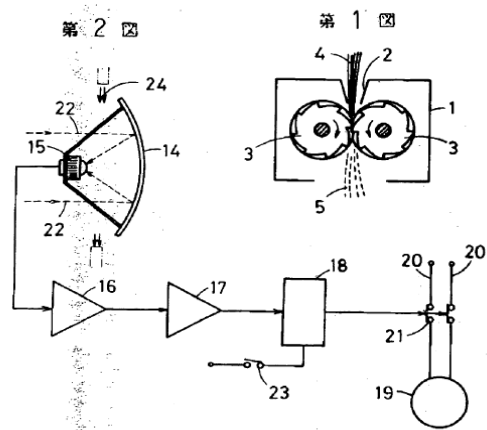


	<p>“In the aforementioned device, when the operator’s hands and fingers mistakenly come in contact with the cutter (12), thermal rays (22) are reflected by the concave mirror (14) and the output voltage of the infrared ray sensor (15) changes. This voltage is amplified by the amplifier (16), passes through the filter (17), operates the lock circuit (18), opens the switch (21) and immediately stops the motor.”</p> <p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734.”</p>
<p>but not a presence of the one or more data bearing documents,</p>	<p>Since data bearing documents do not generate heat as does a person or animal, the infrared sensor discriminates between the presence of a person or animal, and data bearing documents.</p>  <p>“In the aforementioned device, when the operator’s hands and fingers mistakenly come in contact with the cutter (12), thermal rays (22) are reflected by the concave mirror (14) and the output voltage of the infrared ray sensor (15) changes. This voltage is amplified by the amplifier (16), passes through the filter (17), operates the lock circuit (18), opens the switch (21) and immediately stops the motor.”</p> <p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734.”</p>

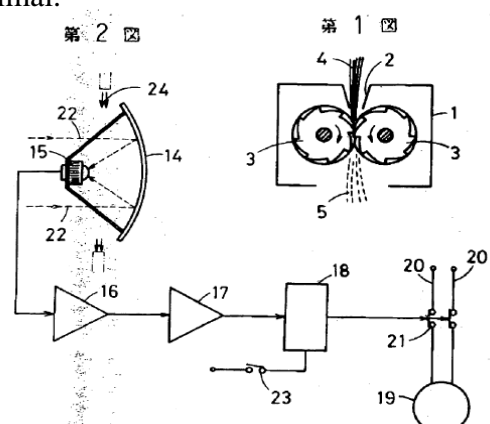
in proximity to the opening based on the detection via the sensor element of an inherent electrical characteristic of the person or animal; and

The infrared sensor operates in the proximity of the opening of the shredder (supra).

The heat identified in Suzuki is a by-product from a electro-chemical reaction generated by a person. The electro-chemical process inherently incorporates electrical characteristics of the person such as ion availability and pH. Electrical characteristics of a person or animal, including capacitance, are dependent on and inherently interrelated with, body temperature, such that the heat identified in Suzuki is a surrogate for an inherent electrical characteristic of a person or animal. Claim 1 of the '276 patent does not distinguish this type of electrical characteristic from any other type of electrical characteristic.



“In the aforementioned device, when the operator’s hands and fingers mistakenly come in contact with the cutter (12), thermal rays (22) are reflected by the concave mirror (14) and the output voltage of the infrared ray sensor (15) changes. This voltage is amplified by the amplifier (16), passes through the filter (17), operates the lock circuit (18), opens the switch (21) and immediately stops the motor.”

	Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734.”
<p>a controller operable to disable the cutter elements responsive to the indicated presence of the person or animal.</p>	<p>Suzuki states in section 2:</p> <p>“A safety device for shredder wherein diction output signals used for a thermal ray sensor device used to detect body temperature – which is loaded at a strategic position on a waste paper insertion opening – are amplified as appropriate, thereby stopping the shredder drive motor”</p> <p>For the drive motor to stop, there must inherently be a controller that operates in response to the presence of a person or animal.</p>  <p>“In the aforementioned device, when the operator’s hands and fingers mistakenly come in contact with the cutter (12), thermal rays (22) are reflected by the concave mirror (14) and the output voltage of the infrared ray sensor (15) changes. This voltage is amplified by the amplifier (16), passes through the filter (17), operates the lock circuit (18), opens the switch (21) and immediately stops the motor.”</p> <p>Suzuki (JP 57-76734), “Laid-Open Utility Model Specification S57-76734.”</p>

